Athletics Director's Misses & Bull's-eyes: Capitalizing on Targets of Opportunities to Hire Women Coaches of Women's Teams at Select D-I Institutions

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Abstract

The number of women head coaches of women's teams at the National Collegiate Athletic Association (NCAA) Division-I level has been well documented and remained stagnant at approximately 42% for years (Acosta & Carpenter, 2014; LaVoi, 2013; 2014; 2015; 2016; 2017). The role of the athletics director within the athletic department is crucial in understanding why this stagnation exists as they ultimately are responsible for making key hiring decisions (Sartore & Cunningham, 2007; Wilson, Gilbert, Gilbert, & Sailor, 2009). This descriptive longitudinal study aims to quantitatively examine the hiring behaviors of individual athletics directors and institutions at select NCAA Division-I schools. Institutions (n=86) and athletics directors (n=115) were graded based on how often they have (or have not) capitalized on hiring a woman to fill a vacant head coaching position for a women's team. The ultimate goal of this study is to continue and extend the mission of the *Women's College Coaches Report Card* (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018) and to use the data to hold decision makers accountable and reverse the current stagnation in the percentage of women head coaches of women's teams.

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Introduction

The groundbreaking passage of Title IX in 1972 was simultaneously a win for girls and women in sport and through an unintended consequence, a loss for women in coaching. Through the pioneering research by Acosta and Carpenter followed by the Tucker Center for Research on Women & Girls in Sports, the number of women coaching women at the National Collegiate Athletic Association (NCAA) Division-I level has been well documented (Acosta & Carpenter, 2014; LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). This number, after dropping from 90% to approximately 40% after the passage of Title IX, has remained stagnant for years (LaVoi, 2017). Yet we know that young girls and women both want and need same-sex role models which are known to positively affect their self-perceptions (Lockwood, 2006).

Utilizing the framework of the Ecological Intersectional Model of Barriers and Supports for Women Coaches, the scope of barriers that women in coaching face can be better understood (LaVoi, 2016). Specifically, the organizational level within this model illuminates issues of bias, discrimination and prejudice that are embedded within organizational practices, policies, and culture (LaVoi, 2016). Many scholars over decades have argued that gender biases along with homologous reproduction systematically work against women looking to enter a career in coaching (Knoppers, 1987; LaVoi, 2016;

Norman, Rankin-Wright, & Allison, 2018; Stangl & Kane, 1991). Within the organization, specifically within collegiate athletic departments, athletics directors are the primary decision makers and hold the majority of power within the hiring process. A disproportionate number and majority of these positions are held by men (Lapchick, 2018), and subsequently employing the theory of homologous reproduction, this means men will typically hire other men (Kanter, 1977). Homologous reproduction is one reason why the percentage of women coaches is stagnant, and points to the need for change in hiring practices and departmental culture to increase the number of women in leadership and coaching positions. To capitalize on target opportunities of change, athletics directors must be committed to recruiting, retaining, and hiring women coaches to lead their women's teams and creating a culture where women feel safe, valued and supported (LaVoi & Wasend, 2018).

The proposed study is an extension of the *Women's College Coaches Report Card* (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018) and compliments other longitudinal studies conducted by Acosta and Carpenter, and Lapchick. As a result of this study, the goal is to continue and extend the mission of the *Women's College Coaches Report Card* (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018) by documenting the opportunities athletics directors have or have not capitalized on hiring a women head coach to fill a vacant head coaching position for a women's team. The data in this study can perhaps increase awareness of hiring patterns, and therefore change the current stagnation in the percentage of women occupying head coaching positions. To accomplish this goal, data herein can be used to

translate awareness into action by holding institutions and athletics directors responsible for their decisions regarding hiring, recruiting, and retaining women coaches.

Literature Review

This section begins by providing background information and research on the history of women within the occupational landscape of sport coaching. It also provides an overview of the existing research on athletics directors and the organizational hiring process in intercollegiate athletics. It then summarizes the theoretical framework of this study, the Ecological Intersectional Model of Barriers and Supports for Women Coaches, and how it pertains to distinct barriers for women in coaching. Throughout the literature review, the systemic barriers within the hiring process will be summarized and the marked gaps in research on the lack of individual and institutional accountability will be highlighted.

Women in Coaching

The passage of Title IX in 1972 was historic for many reasons, but most notably for the participation opportunities it provided for females in a sporting context. This federal civil rights law made it illegal in the United States to discriminate on the basis of sex in any federally funded education program (Education Amendments of 1972, 1972). Title IX allowed opportunities for girls and women to participate in sport they previously had not been afforded. Prior to Title IX's passage, it was reported that a mere 3% of females participated in sport (National Collegiate Athletic Association, 2017). Now, forty-five years after Title IX was implemented, approximately 43% of girls are participating in sport (National Collegiate Athletic Association, 2017). While Title IX has

dramatically increased the number of female participants in sport, it had unintended consequences on the percentage of women in coaching.

When Title IX was first established in 1972, over 90% of women's teams were coached by women (Acosta & Carpenter, 2014). Today however, only about ~42% of women are head coaches of women's teams at the NCAA D-I level (LaVoi, 2018). Currently, there are a record number of women's teams competing, which means there is also a record number of job opportunities for aspiring female head coaches (Acosta & Carpenter, 2014). Yet, even with the historic amount of job opportunities in the occupational landscape, the percentage of women's teams coached by women has remained stagnant for years (Acosta & Carpenter, 2014; LaVoi, 2018). While Title IX was believed to increase both participation and leadership positions for women, the fulfillment of coaching and leadership roles held by women in the sporting world remains unrealized.

Why women coaches matter? The importance of girls and women having female head coaches is often overlooked. Men have been afforded the opportunity to regularly have same-sex role models in (and outside of) a sporting context, as 95.4% of NCAA head coaches of men's teams are men (Wilson, 2012). However, as previously pointed out, women are not always guaranteed that opportunity, as less than half of women's teams are coached by women (LaVoi, 2017). College-aged women are more positively affected and have overall better self-perceptions when having a female role model, as opposed to a male role model (Lockwood, 2006). Women identify more with a strong same-sex role model and "explicitly stated that it was important for them to have a

role model who had overturned gender stereotypes or achieved success in a traditionally male-dominated field" (Lockwood, 2006). Young women need strong same-sex role models to look up to, yet women remain the the minority in coaching.

In addition to serving young female athletes, having women in head coaching positions is beneficial in other facets for athletics departments. Having a diverse workforce is vital to the success of an organization. There is a positive relationship between gender and racial diversity of organizations which produce better business results as compared to organizations with homogenous workforces (Herring, 2009). Diversity is known to enhance a group's creativity and problem-solving ability while also producing positive performance outcomes which are dependent on "people from various backgrounds working together and capitalizing on their differences" (Herring, 2009). Ensuring athletics departments are composed of a diverse set of staff better serves the department, the institution as a whole, the stakeholders, and most importantly the student-athletes. However, despite these data, women are still vastly underrepresented in head coaching positions for the past decade (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018), and this is part due to the hiring practices of athletics directors.

Importance of Athletics Director Leadership

Through every stage of sport, the athletics director is the most highly regarded position within an athletics department and this is especially true at the highest level of intercollegiate athletics. Athletics directors hold a great deal of power and are responsible for overseeing the entire department and typically report directly to an institution's president or chancellor (Wilson, Gilbert, Gilbert, & Sailor, 2009). The athletics director is

involved in every aspect of an athletic department, they ultimately are in charge of disciplinary actions, academic needs, budgetary concerns, and making key hiring decisions (Sartore & Cunningham, 2007; Wilson, Gilbert, Gilbert, & Sailor, 2009).

Not only are athletics directors responsible for hiring other prominent figures within an athletics department, such as administrative staff and coaches, but they also set the culture where each sport team functions. "Athletics directors provide leadership, perspective, and guidance, all of which shape the athletics program on their campuses. Their experience, decision making style, and their commitment concerning equity often have an impact upon the vision and goals of the program they administer and the people they hire" (Acosta & Carpenter, 2014). Understanding the importance of the athletics director's role is within an institution and who is filling that role is crucial in understanding the lack of women in head coaching positions.

Current Culture of Organizational Hiring Process in Intercollegiate Athletics

In the most recent data, at NCAA Division-I Football Bowl Subdivision (FBS) schools, women held only 12 of the 130 (9.2%) athletics director positions (Lapchick, 2018). Men held 90.8% of athletics director positions at FBS schools and more specifically, most were held by White men (76.9%) (Lapchick, 2018). Based on the data, it is clear that men hold a majority of the positions of power within the sports world. It was also found that 11.3% of athletics departments at FBS schools have absolutely *no female representation at any level* within their administration (Acosta & Carpenter, 2014). Studies have also indicated that women have been relegated to athletics director positions at NCAA Division-II and Division-III institutions which are generally seen as

less powerful or prestigious compared to Division-I athletics director positions (Whisenant, Pederson, & Obernour, 2002).

Not only are the overwhelming majority of NCAA Division-I athletics director positions being occupied by men, there is evidence that male athletic administrators with high social capital investments advance more often than men with lower social capital investment (Sagas & Cunningham, 2004). Social capital investments are investments in personal networks and contacts (i.e., the "Good Old Boys Club"). This difference, however, is not observed for female administrators. The gender difference could imply that there is discrimination in the hiring process as men are rewarded and advancing more often due to their social capital investments but women are not benefiting from their social capital investments (Sagas & Cunningham, 2004). Discrimination within the hiring process, among other barriers that women in sport leadership positions face, can be best understood utilizing an ecological framework and the Ecological Intersectional Model of Barriers and Supports for Women Coaches (LaVoi, 2016; LaVoi & Dutove, 2012).

Ecological Intersectional Model of Barriers for Women Coaches

The framework to best understand the research surrounding women in coaching and the barriers they face within the occupational landscape is derived from the Ecological Systems Theory (Bronfenbrenner, 1979). The Ecological Systems Theory incorporates a multilevel model that focuses on four distinct yet interwoven levels. These levels include: individual, interpersonal, organizational and societal (Bronfenbrenner, 1979). The Ecological Systems Theory was then applied to sport to outline each of the four levels of influence in terms of women in coaching, as seen in Figure 1 (LaVoi &

Dutove, 2012). Utilizing the ecological framework in this context allows for the examination of both supports and barriers women in coaching face (LaVoi, 2016). Specifically understanding both supports and barriers, Figure 2, can help aid in understanding the experiences of women in the occupational coaching landscape (LaVoi, 2016; LaVoi & Dutove, 2012).

In the proposed study, understanding the barriers and supports women in coaching face at the organizational level within the Ecological Intersectional Model is crucial. The focus of this study is the organizational level. The purpose of this research is to hold athletics directors and institutions accountable in their roles of supporting women in coaching, which the organizational level of influence encompasses. The organizational level is primarily concerned with supports and barriers within an institution's culture, practices, policies, and norms (LaVoi, 2016). The barriers that women in the coaching profession experience within the organizational level outweigh the supports (LaVoi & Dutove, 2012). Barriers include: the culture surrounding hiring, evaluation, and retention of women, wage inequities, tokenism, the lack of family-friendly policies, and limited upward mobility for women in coaching (LaVoi, 2016).

The organizational level also deals with perceptions of effective leadership and how leadership stereotypes and gender bias impact women in coaching (LaVoi, 2016). Typically, the organizational level illuminates issues of discrimination and prejudice that are embedded within the organization's practices and culture (LaVoi, 2016). A key finding from a qualitative study conducted by LaVoi and Wasend was athletics directors at A and B grade schools per the *Women's College Coaches Report Card* are intentional

in developing a supportive organizational culture (2018). As previously noted, the person who shapes the culture within an institution's athletics department is the athletics director. The athletics director's goals, visions, beliefs, values and experiences heavily influence the coaches that work within their administration (Acosta & Carpenter, 2014).

A key responsibility of an athletics director is making hiring decisions. Over time those hiring decisions can illustrate in part if women coaches are valued and supported or not within the organization, meaning the athletic department. The composition of people hired over time and the rate of head coach turnover in an athletic department can reveal a great deal about the culture, not to mention the decision making practices of the athletics director. The organizational level is where the decision making occurs that can change the current stagnation, keep it stagnant, or decrease the percentage, of women in head coaching positions. To date, no researcher has examined decision making of coach hires (i.e., sex of individual who gets hired) and coach turnover rates (which reflects retention and health of the culture) over time within an athletics department, and linked these data to a particular athletics director. This study will fill this gap and add a greater level of detail, nuance, and therefore accountability. What is known, is that distinct and powerful structural barriers, including hegemonic masculinity and homologous reproduction, take place within the hiring process within organizations (LaVoi & Dutove, 2012).

Hegemonic Masculinity & Homologous Reproduction

Hegemony was first established as a political concept by Antonio Gramsci and it has evolved to a modern definition where the basic framework states the ruling class manipulates its values and dominance over a subordinate group, and the subordinate

group accepts and gives consent to this being the status quo (Whisenant, Pederson, & Obernour, 2002). Hegemony defined in terms of gender more narrowly is referred to as hegemonic masculinity, first coined by Connell (1987). "Hegemonic masculinity is the acceptance of masculinity as the defining characteristic of Western society that places women in a lower social position" (Whisenant, Pederson, & Obernour, 2002).

Sport has traditionally been, and some argue remains, a masculine context primarily dominated by men in all facets. The heavy male influence and control on sport has resulted in sport organizations accepting traditional masculinity as the status quo and creating a culture of hegemonic masculinity (Schell & Rodriguez, 2000). Utilizing a symbolic interactionist perspective, Sartore and Cunningham proposed that gender-role meanings and stereotypes traditionally associated with sport may limit the ability and capacity of women to hold leadership positions within the sport context (2007). A crucial part to the concept of hegemonic masculinity, especially in sport, is women (the subordinate group) give consent to this being the organizational structure (Whisenant, 2008), as "that's just the way it is." When women accept and normalize the male dominated culture within sport, they "relinquish what limited power they may have as well as future access to power in sport" (Whisenant, 2008). This is embodied through one of the most powerful structural variables that reproduces hegemonic masculinity: homologous reproduction (Stangl & Kane, 1991).

Homologous reproduction is a process that occurs when the majority group in power systematically reproduces itself to ensure it remains in power (Kanter, 1977). The theory of homologous reproduction was applied to sport to explain the lack of women in

coaching and leadership roles (Knoppers, 1987; Stangl & Kane, 1991). It was argued that the effects of structural barriers such as opportunity, power, and proportionality first brought up by Kanter as limiting factors, are applicable to understanding women's underrepresentation in coaching (Knoppers, 1987). The theory of homologous reproduction was also tested in terms of interscholastic athletics where it was found that women in athletics director positions were more likely to hire women for head coaching positions than male athletics directors (Stangl & Kane, 1991). Based on the data, homologous reproduction and the sex of the athletics directors, as well as administrators and principals, within interscholastic athletics has shown to be a factor in hiring decisions (Sartore & Cunningham, 2007). Similarly, at the collegiate level, data indicates that male athletics directors are more likely to hire male coaches (Acosta & Carpenter, 2014). When men hire other men for sport leadership or coaching positions over their female counterparts, male hegemony is maintained.

Previous researchers have stressed the idea of male hegemony being present in the sporting world (Sartore & Cunningham, 2007; Schell & Rodriguez, 2000; Whisenant, 2008; Whisenant, Pederson, & Obernour, 2002). Through hegemonic masculinity, the powerful mechanism of homologous reproduction within the occupational coaching landscape exists (Knoppers, 1987; Lovett & Lowry, 1994; Stangl & Kane, 1991;). Due to the overwhelming representation of men in athletics directors' positions, homologous reproduction presents as a powerful and distinct barrier women in the occupational coaching landscape must face (LaVoi & Dutove, 2012). Through the hiring process, it can be determined who the athletics director values and supports, and more importantly

who they do not. An athletics director who does not value women can use homologous reproduction within the hiring process to ensure men continue to remain in power.

Significance of Study

There are many ways the present study is significant and provides a unique point of departure to the current literature. While there is research to indicate there is a current stagnation of women coaching women's teams, the data is limited in depth and nuance as it pertains to an institution and a particular individual(s) responsible for strengthening, maintaining or reversing the stagnation. The specificity of data collected for this study will offer new insight into the hiring, and perhaps the organizational culture, of the most powerful, visible and lucrative athletic departments in the NCAA. Not only will this study examine specific institutions but the numerous athletics directors who hold the important responsibility of making decisions for the entire department within the institution. This study will be the first to statistically identify which specific institutions and athletics directors are committed to recruiting, retaining, and hiring women coaches and those who are not.

To date, the data presented in the *Women's College Coaches Report Card* (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018) pertains to the organizational, sport, and conference level. Each institution, sport, and conference in the *Women's College Coaches Report Card* (*WCCRC)* receives a grade, A-F, based on the percentage of women head coaches of women's teams in an attempt to hold institutions accountable in the hiring and retention of women coaches. Based on the information from the *Women's College Coaches Report Card*, a study examining athletics directors at institutions who received

an A or B was conducted (LaVoi & Wasend, 2018). This study attempted to "learn from athletics directors that have a track record of success and 'doing it right' in terms of hiring and retaining a majority of women coaches for their women's teams" (LaVoi & Wasend, 2018). However, to their own admission, some athletics directors inherited the grade given to their institution and were not responsible for the current composition of the coaching staff for women's teams. The current study will address this limitation and examine and assign a grade to individual athletics directors, nested within the organizational/institutional level, based on how often an athletics director fails to or capitalizes on their opportunity to hire a woman head coach for women's teams.

Quantifying these hiring decisions are imperative in understanding athletics director's values, beliefs, and commitment to diversity. Female coaches exist in an organizational culture that is influenced and shaped by the hiring practices of athletics directors (LaVoi & Wasend, 2018). This data provides statistical evidence to prove if an individual athletics director values and supports women and if they create an organizational culture that does the same. Furthermore, these hiring decisions can perhaps also reflect the culture of the institution in which the athletic department exists. This descriptive longitudinal study aims to quantitatively examine the hiring behaviors of NCAA Division-I individual athletics directors. It is the first study to our knowledge, to analyze the specific individuals responsible for making hiring decisions and expose the crucial role athletics directors play within the hiring process. By evaluating hiring decisions over time, the commitment or lack thereof, of an athletics director to recruiting, retaining, and hiring women will emerge. This study will help identify the athletics

directors who have a track record of success for hiring women, and allow future researchers to learn from them, as opposed to athletics directors who simply inherited a department that was already doing well as defined by an A or B grade of the *Women's College Coaches Report Card* (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018).

Researchers have documented that male athletics directors are more likely to hire male coaches and fewer female coaches exist at an institution when the athletics director is male (Acosta & Carpenter, 2014; Sartore & Cunningham, 2007; Stangl & Kane, 1991), this hiring pattern is referred to as homologous reproduction (Kanter, 1977). However, to our knowledge the Acosta and Carpenter finding was not tested for or proven to be statistically significant, it was reported as an observation. The current study will test homologous reproduction at the collegiate level by using quantitative analysis, which has been employed less frequently. This study will give statistical evidence to support or refute the empirical evidence found by previous researchers that states homologous reproduction is present within the hiring process. This data set can definitively verify if male athletics directors explicitly hire more men to coach women's teams, or if they do not. Conversely, this data can also confirm or refute if female athletics directors are more likely to hire women coaches. Moreover, previous studies related to homologous reproduction in athletic hiring decisions are cross-sectional whereas the current study is longitudinal and will examine hiring patterns over time.

Researchers have tracked the overall change in percentage of female head coaches of women's teams for decades and have found that it has remained stagnant (Acosta & Carpenter, 2014; LaVoi, 2018). This research is imperative and important to the field, yet

researchers have not specifically examined the number of opportunities each institution or athletics director has accrued to hire a woman into a vacant coaching position and if indeed a woman has been hired. This study will be the first to examine the relationship between the number of opportunities an institution and an athletics director has had to hire a head coach of a women's team and the number of women who actually become employed. Due to the longitudinal nature of this study, each athletics director can be and will be tracked even if they become employed by multiple institutions. This data quantitatively gives insight as to who athletics directors and institutions value and support and who they do not.

Researchers have documented that approximately 8-10% of head coaching positions of NCAA women's teams turnover each year (LaVoi, 2017). This data suggests opportunities exist to hire women head coaches for women's teams every year. As previously noted, the data also indicates the percentage of women in the coaching profession at the Division-I level has remained stagnant for the last decade (Acosta & Carpenter, 2014; LaVoi, 2017). The current stagnation has persisted despite the opportunities to change the percentage of women head coaches due to head coach turnover. No researchers, to date, have quantifiably examined the turnover rates of NCAA head coaches of women's teams. This study will be the first do so for each institution over time. This information can be linked to individual athletics directors and reflect their leadership effectiveness and the health of the athletics department's culture based on the retention (or lack thereof) of head coaches. Turnover rates are also a reflection of the organizational culture created by the athletics director which can give

insight to the athletics director's values and beliefs. Namely, are women valued and supported within the created culture and are athletics directors truly committed to recruiting and retaining women or not.

Furthermore, this longitudinal study will be the first to categorize coach turnover in terms of sex. This study will record the sex of the coach vacating the position and compare it to the sex of the coach hired for the position. By categorizing "the coach-change pair", this study will help forward understanding regarding the trends in coach turnover over time. Data will provide insight to the number of opportunities athletics directors had to explicitly improve the current stagnation (i.e. a male coach vacating a position, a female coach hired for a position) and how often they capitalized on those opportunities. Again, this data can be associated to both the specific athletics director and the institution as a whole to understand if they are capitalizing on their opportunities to increase the percentage of women coaching women's teams or not. This provides multiple layers of accountability, both for the individual and the institution.

As already suggested, this research can be used to evaluate individual athletics director's commitment to recruiting and retaining women's head coaches over time. Information gathered for this study can be used by athletics directors and institutions to reflect and track the opportunities they had to hire a woman and the hiring decisions they ultimately made. Due to the longitudinal nature of this study, each athletics director employed by an institution will be evaluated every year of data collection over five years. An institution may have multiple different athletics directors as their leader over time. This will provide quantifiable information for institutions to understand different hiring

patterns which may emerge. The data can also be used by institutions and stakeholders who are responsible for hiring athletics directors to ensure they employ an individual dedicated to recruiting, hiring, and retaining women coaches.

The data gathered for this study can continue to be tracked over time to assess if athletics directors remain stagnant, improve, or diminish their commitment to hiring female coaches. In return, it can also assess the institution's commitment to ensuring women are leading women's teams by employing athletics directors that are committed to hiring women. This data can quantitatively pinpoint each hiring decision an athletic director made throughout his or her career even as they become employed at different schools. The dataset is comprehensive and specific meaning we can identify during which year, at which institution, and for what sport an athletics director had the opportunity to make a hire and ultimately what decision was made.

While this study quantitatively assesses hiring behaviors of select NCAA Division-I institutions and athletics directors for women's teams it could also be utilized to compare across conferences, divisions, or contrasted against the hiring behaviors seen in men's sports. This novel research is guaranteed to provide valuable information and insight for decision makers and advocates who aim to change the current stagnation of female and hold athletics directors and institutions accountable for their hiring practices and decisions. The ultimate goal is to use the data to reverse the stagnation in the percentage of women head coaches of women's teams.

Research Questions

The proposed study is driven by the following research questions:

Institutional Accountability

1. By institution, how has the percentage of women head coaches of women's National Collegiate Athletic Association (NCAA) Division-I teams at select institutions (n =86) changed from 2014 to 2018?
    a. Which institutions, over time, have had the highest rate of head coach turnover?
    b. Which institutions, over time, have had the lowest rate of head coach turnover?
2. When a head coach position becomes available for a women's team, what is the sex of the coach vacating the position compared to the sex of the coach hired for the position at each institution? (i.e., "the coach-change pair", male replaced by male, male replaced by female, female replaced by female, female replaced by male)
3. When a head coaching position becomes available for a women's team, what grades, A through F, did institutions earn for hiring practices?
    a. Which institutions were exceptional in their hiring practices for hiring women head coaches of women's teams, as defined by earning an A grade?
    b. Which institutions are failing in their hiring practices for hiring women head coaches of women's teams, as defined by earning an F grade?

Athletics Directors Accountability

4. When a head coaching position becomes available for a women's team, what grades, A through F, did an individual athletics directors earn for hiring practices?
    a. Which athletics directors were exceptional in their hiring practices for hiring women head coaches of women's teams, as defined by earning an A grade?
    b. Which athletics directors are failing in their hiring practices for hiring women head coaches of women's teams, as defined by earning an F grade?
5. Does the sex of the athletic director increase or decrease the probability a woman is hired as a head coach?

Methods

Study Design

This descriptive longitudinal study aimed to quantitatively examine the hiring behaviors of NCAA Division-I athletics directors over five years. To best answer the research questions, two different sources of data were utilized. One source of data was previously collected for the annual *Women's College Coaches Report Card* (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). The other set of data were collected in March of 2019. All data gathered remains in the public domain; therefore, IRB approval was not required. The detailed and rigorous methodology used was derived from the process laid out in the annual *Women's College Coaches Report Card* (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018).

Sample

Data were collected from NCAA Division-I institutions (N = 86) in all geographic regions of the United States that are members of seven select conferences in the Football Bowl Series (FBS). Conferences include: American (AAC), Atlantic Coast Conference (ACC), Big 12, Big East, B1G Ten, Pacific 12 (Pac-12), and Southeastern Conference (SEC). These conferences were selected as data for these institutions were already collected for the *Women's College Coaches Report Card* starting in 2012 (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018).

Data Collection

Source 1. To best answer the first, second, and third research questions, data collected from the existing *Women's College Coaches Report Card* was used (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). This data was a secondary data analysis from the existing data set comprised in the *Women's College Coaches Report Card* (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). A coding key was developed for consistency among coders during the original data collection completed by researchers in the Tucker Center for Research on Girls & Women in Sport. A condensed coding key containing only variables pertaining to this proposed study can be seen in Appendix A. Data collected included: academic year, conference, school, position (head coach), head coach first and last name, and sex of head coach.

Researchers trained by the Tucker Center for Research on Girls & Women in Sport collected this data each academic year starting in 2012-2013 through the 2018-2019 academic year. Due to institutional shifts between conferences, this study began utilizing the data set starting in the 2014-2015 academic year. Researchers collected information

pertaining to each variable listed above by utilizing each institution's official athletics website and reviewing the coaching staff biography for each women's sport team. For a comprehensive methodology, refer to the 2012-2013 version of the *Women's College Coaches Report Card* (LaVoi, 2013).

Source 2. To best answer the fourth and fifth research questions, new data was collected that extended existing *WCCRC* data, but provided more depth. A coding key was developed by the primary researcher to collect information to help answer the fourth and fifth research questions (Appendix B). Data collected included: academic year, conference, school, position (athletics director), athletics director first and last name, sex of athletics director. This data was collected to identify the athletics director responsible for the head coach changes observed in the data collected from Source 1.

The primary researcher collected this data in March of 2019. The data set begins in the 2014-2015 academic year through the 2018-2019 academic year. The primary researcher collected data pertaining to each variable listed above in the same method as data for Source 1 utilizing institution's official athletics website and reviewing the athletics director position for each institution.

Grading Criteria and Scale

The grading criteria and grading scale used to evaluate institutions and athletics directors was derived from the process laid out in the annual *Women's College Coaches Report Card* (LaVoi, 2013). In summary, if a traditional grading scale were utilized (e.g., A = 90-100, B = 80-89, C = 70-79, D = 60-69, F $\leq$ 59), the vast majority of institutions and athletics directors would receive a D or an F grade. Therefore, the scale used to

assign grades, as seen in the annual *Women's College Coaches Report Card* (LaVoi, 2013), is as follows: A = 70-100%, B = 55-69%, C = 40- 54%, D = 25-39%, F = 0-24% of female head coaches of women's teams hired. Institutions and athletics directors with the same percentage of female head coaches hired were ordered alphabetically.

Data Analysis

Descriptive statistics were calculated to provide insight on the first, second, third, and fourth research questions. These descriptive statistics were calculated to determine the occupational position and the sex of person occupying that role.

Logistic regression was used to address the fifth research question. Logistic regression allows for the prediction of a categorical outcome based on continuous or categorical predictor variables. This produces an odds ratio that a certain outcome will occur based on an independent variable. The independent variable (the predictor) was sex of the athletics director. The dependent variable was sex of the head coach (male/female). The logistic regression will find the likelihood that a female head coach is hired or a male head coach is hired based on the sex of the athletics director. Assumptions, model fit, and practical significance were checked according to the specifications outlined in Field (2005). Descriptive statistics were also used to provide further insight to the fifth research question.

Results

Institutional Accountability

Research Question 1: By institution, how has the percentage of women head coaches of women's National Collegiate Athletic Association (NCAA) Division-I teams at select institutions (n =86) changed from 2014 to 2018?

Head coach turnover is a target of opportunity for institutions and athletics directors to hire women. Over the past five academic years (2014-2018), every institution in the sample had experienced turnover. Table 1 identifies the number of coaches who turned over, the total number of coaches in the sample, and the turnover rate of each institution between the years 2014-2018. The number of head coach turnover (# Turnover, seen in Table 1) is based off of the number of coaching positions that have been vacated at each school between 2014 and 2018. The number of head coaching positions that have turned over varied by school. Schools in this sample experienced between 1 and 14 total head coaches turning over in the last five years, the average being 5.14 coaches.

Schools offer a different number of women's sports, therefore they employ a different number of head coaches. Schools offer on average 11.3 women's sports, ranging between 7 to 18 sports. The total number of coaches at each institution (Total Coaches) variable was calculated by taking the number of women's sports offered at an institution multiplied by the number of years (N=5) the data set encompasses ($Total\ Coaches = \#\ of\ sports\ offered \times N\ years$). The total number of coaches at each institution from 2014-2018 ranges from 35 to 90 coaches, the average was 56.4 coaches. Some schools, such as Stanford, experienced a high number of coach turnover (n=10) because they offer a greater number of sports (n=90). Due to the variety of sports

offered at each institution, to better compare each institution, the turnover rate (%Turnover) was calculated.

The turnover rate was calculated by taking the number of head coach turnover over the total number of coaches ($\%Turnover = \left(\frac{\#Turnover}{Total\ Coaches}\right) \times 100$). The rate of head coach turnover, seen in Table 1, varied by school from 1.3% to 21.5%. The average percent of head coach turnover schools experienced from 2014-2018 was 9.1%. Table 1 answers research questions 1, 1a, and 1b by identifying the institutions who experience the most and least amount of head coach turnover.

Research Question 1a. Which institutions, over time, have had the highest rate of head coach turnover?

Research Question 1b. Which institutions, over time, have had the lowest rate of head coach turnover?

To address Research Questions 1a and 1b, the institutions in the top and bottom ten percent in terms of turnover rate were examined. The institutions with the highest rate of head coach turnover between 2014 and 2018 were Georgetown (21.5%), Notre Dame (18.5%), Oregon (18.0%), Mississippi (17.8%), Washington (16.4%), Arizona State (16.0%), Houston (16.0%), and Seaton Hall (15.6%). In contrast, the institutions with the lowest rate of head coach turnover were North Carolina (1.3%), West Virginia (1.8%), Miami (2.0%), Oklahoma (2.5%), Michigan State (3.1%), South Carolina (3.3%), Butler (3.6%), and Oklahoma (4.0%) between 2014-2018.

Table 1

Percent of head coach turnover for women's teams at select Division-I institution from 2014-2018

School	# Turnover	Total Coaches	%Turnover
Georgetown	14	65	21.5
Notre Dame	12	65	18.5
Oregon	9	50	18.0
Mississippi	8	45	17.8
Washington	9	55	16.4
Arizona State	12	75	16.0
Houston	8	50	16.0
Seton Hall	7	45	15.6
Illinois	8	55	14.5
Oregon State	7	50	14.0
Arizona	8	60	13.3
Georgia	8	60	13.3
Washington State	6	45	13.3
Rutgers	9	70	12.9
Arkansas	7	55	12.7
Texas	7	55	12.7
Clemson	5	40	12.5
Wake Forest	5	40	12.5
Iowa	8	65	12.3
Villanova	8	65	12.3
Virginia	8	65	12.3
Pittsburgh	6	50	12.0
NC State	7	60	11.7
TCU	7	60	11.7
Kansas State	4	35	11.4
Central Florida	5	45	11.1
Stanford	10	90	11.1
E. Carolina	6	55	10.9
Maryland	6	55	10.9
Providence	6	55	10.9
Syracuse	6	55	10.9
Temple	6	55	10.9
Virginia Tech	6	55	10.9
USC	7	65	10.8
Mississippi State	4	40	10.0
UC Berkeley	8	80	10.0
Xavier	4	40	10.0
Connecticut	6	65	9.2
Indiana	6	65	9.2
Boston College	7	80	8.8
Florida	5	60	8.3
Northwestern	5	60	8.3
Wisconsin	5	60	8.3

School	# Turnover	Total Coaches	%Turnover
Colorado	4	50	8.0
Penn State	6	75	8.0
Purdue	4	50	8.0
Tulane	4	50	8.0
Louisville	5	65	7.7
South Florida	3	40	7.5
Texas Tech	3	40	7.5
Iowa State	4	55	7.3
Kansas	4	55	7.3
Missouri	4	55	7.3
SMU	4	55	7.3
Minnesota	5	70	7.1
Utah	5	70	7.1
Ohio State	6	85	7.1
Alabama	4	60	6.7
Auburn	4	60	6.7
Memphis	3	45	6.7
St. John's	3	45	6.7
Tennessee	4	60	6.7
Tulsa	3	45	6.7
Vanderbilt	3	45	6.7
Cincinnatti	3	50	6.0
DePaul	2	35	5.7
Marquette	2	35	5.7
UCLA	4	70	5.7
Florida State	3	55	5.5
Texas A&M	3	55	5.5
Michigan	4	75	5.3
Creighton	2	40	5.0
Georgia Tech	2	40	5.0
Kentucky	3	60	5.0
LSU	3	65	4.6
Baylor	2	45	4.4
Duke	3	70	4.3
Nebraska	3	70	4.3
Oklahoma	2	50	4.0
Butler	2	55	3.6
South Carolina	2	60	3.3
Michigan State	2	65	3.1
Oklahoma State	1	40	2.5
Miami	1	50	2.0
West Virginia	1	55	1.8
North Carolina	1	75	1.3

Research Question 2: When a head coach position becomes available for a women's team, what is the sex of the coach vacating the position compared to the sex of the coach hired for the position at each institution? (i.e., "the coach-change pair", male replaced by male, male replaced by female, female replaced by female, female replaced by male)

The sex composition of the former coach-new coach hire dyad between 2014-2018 is summarized by institution (i.e. if a male coach was replaced by a female, it was coded as male-female) to answer the second research question. Table 2 addresses the second research question by comparing the sex of the coach vacating the head coaching position to the sex of the coach hired for each institution. Over the last five years, in over half of all vacant positions (246 of 441; 55.8%) a male was hired. Schools hired between 1 and 14 total head coaches in the last five years, hiring an average of 5.14 coaches.

Table 2

Sex composition of head coach vacancy-hires from 2014 to 2018 alphabetically by institution

Former Coach-New Coach Sex Dyad Hires					
School	**male-male**	**male-female**	**female-female**	**female-male**	**Total Hires**
Alabama	3		1		4
Arizona	2	2	1	3	8
Arizona State	5	2	3	2	12
Arkansas	5	2			7
Auburn	3		1		4
Baylor	1		1		2
Boston College	4	1	1	1	7
Butler			1	1	2
Central Floriday			4	1	5
Cincinnatti		1	1	1	3
Clemson	1	2	1	1	5
Colorado		1	2	1	4
Connecticut	2	1	1	2	6
Creighton	2				2
DePaul		1	1		2
Duke		1	2		3
E. Carolina	4		1	1	6
Florida	3		1	1	5
Florida State	1		2		3
Georgetown	3	5	3	3	14
Georgia	5	1	1	1	8
Georgia Tech			2		2
Houston	3	1	3	1	8
Illinios	3	2	2	1	8
Indiana	2	1	2	1	6
Iowa	4		3	1	8
Iowa State	1		1	2	4
Kansas	1	1	1	1	4
Kansas State	1	1		2	4
Kentucky	3				3
Louisville	2		2	1	5
LSU	1			2	3
Marquette	1		1		2
Maryland	3	1	2		6
Memphis	2			1	3
Miami			1		1
Michigan	2	1	1		4
Michigan State			1	1	2
Minnesota		1	4		5
Mississippi	1	3	2	2	8
Mississippi State	2	1		1	4
Missouri	2	1		1	4
Nebraska		1	2		3
North Carolina		1			1

Former Coach-New Coach Gender Sex Hires					
School	**male-male**	**male-female**	**female-female**	**female-male**	**Total Hires**
NC State	2	5			7
Northwestern	2	1	1	1	5
Notre Dame	8	2		2	12
Ohio State	1	1	2	2	6
Oklahoma		2			2
Oklahoma State	1				1
Oregon	2	2	3	2	9
Oregon State	3	1	3		7
Penn State	2	1		3	6
Pittsburgh	2	1	2	1	6
Providence	2	1	1	2	6
Purdue	3		1		4
Rutgers	3	4	1	1	9
Seton Hall	2	2	2	1	7
SMU	1	2		1	4
South Carolina		1		1	2
South Florida		1	2		3
St John's			2	1	3
Stanford	3	3	2	2	10
Syracuse	4	1		1	6
TCU	5	1	1		7
Temple	3	1	1	1	6
Tennessee		3	1		4
Texas	2		1	4	7
Texas A & M	1		2		3
Texas Tech	1	1	1		3
Tulane	2		2		4
Tulsa	1	1	1		3
UC Berkeley	3	4	1		8
UCLA	4				4
USC	4	1		2	7
Utah	2	2		1	5
Vanderbilt	1		2		3
Villanova	6	1	1		8
Virginia	3	3	2		8
Virginia Tech	4	1		1	6
Wake Forest	3	1	1		5
Washington	4	3	2		9
Washington State	5		1		6
West Virginia				1	1
Wisconsin	2	1	1	1	5
Xavier	2	2			4
TOTAL	**177**	**93**	**102**	**69**	**441**

Research Question 3: When a head coaching position becomes available for a women's team, what grades, A through F, did institutions earn for hiring practices?

3a: Which institutions were exceptional in their hiring practices for hiring women head coaches of women's teams, as defined by earning an A grade?

3b: Which institutions are failing in their hiring practices for hiring women head coaches of women's teams, as defined by earning an F grade?

When a head coach position became available for a women's team, each institution earned a grade (A-F) for their hiring practices to answer the third research question. Table 3 summarizes each institution's grade based on the number of women head coaches that they hired for a women's team per the number of opportunities had to make a hire. Since 2014, ten institutions (DePaul, Duke, Georgia Tech, Miami, Minnesota, Nebraska, North Carolina, Oklahoma, South Florida, and Tennessee) hired a woman every time a position was vacated, addressing research question 3a. In that same time period, seven institutions (Creighton, Kentucky, LSU, Memphis, Oklahoma State, UCLA, and West Virginia) have failed to hire a single woman for any of their open head coaching positions for women's teams, addressing research question 3b. Of the 86 institutions in this sample, only 13 received an A grade (15.1%). In comparison, 25 of the 86 schools (29.1%) earned an F. In this sample, the number of institutions earning a B (n=17) or C grade (n=23) were greater than those earning a D grade (n=8).

Table 3

Grades by institution for percent of women head coaches hired for women's teams per the number of opportunities had to make a hire

School	A-F	%
DePaul	**A**	100.0
Duke	**A**	100.0
Georgia Tech	**A**	100.0
Miami	**A**	100.0
Minnesota	**A**	100.0
Nebraska	**A**	100.0
North Carolina	**A**	100.0
Oklahoma	**A**	100.0
South Florida	**A**	100.0
Tennessee	**A**	100.0
Central Floriday	**A**	80.0
Colorado	**A**	75.0
NC State	**A**	71.4
Cincinnatti	**B**	66.7
Florida State	**B**	66.7
St John's	**B**	66.7
Texas A & M	**B**	66.7
Texas Tech	**B**	66.7
Tulsa	**B**	66.7
Vanderbilt	**B**	66.7
UC Berkeley	**B**	62.5
Mississippi	**B**	62.5
Virginia	**B**	62.5
Clemson	**B**	60.0
Georgetown	**B**	57.1
Oregon State	**B**	57.1
Seton Hall	**B**	57.1
Oregon	**B**	55.6
Rutgers	**B**	55.6
Washington	**B**	55.6
Baylor	**C**	50.0
Butler	**C**	50.0
Houston	**C**	50.0
Illinios	**C**	50.0
Indiana	**C**	50.0
Kansas	**C**	50.0
Marquette	**C**	50.0
Maryland	**C**	50.0
Michigan	**C**	50.0
Michigan State	**C**	50.0
Ohio State	**C**	50.0
Pittsburgh	**C**	50.0
SMU	**C**	50.0

School	A-F	%
South Carolina	**C**	50.0
Stanford	**C**	50.0
Tulane	**C**	50.0
Xavier	**C**	50.0
Arizona State	**C**	41.7
Louisville	**C**	40.0
Northwestern	**C**	40.0
Utah	**C**	40.0
Wake Forest	**C**	40.0
Wisconsin	**C**	40.0
Arizona	**D**	37.5
Iowa	**D**	37.5
Connecticut	**D**	33.3
Providence	**D**	33.3
Temple	**D**	33.3
Arkansas	**D**	28.6
Boston College	**D**	28.6
TCU	**D**	28.6
Alabama	**F**	25.0
Auburn	**F**	25.0
Georgia	**F**	25.0
Iowa State	**F**	25.0
Kansas State	**F**	25.0
Mississippi State	**F**	25.0
Missouri	**F**	25.0
Purdue	**F**	25.0
Villanova	**F**	25.0
Florida	**F**	20.0
E. Carolina	**F**	16.7
Notre Dame	**F**	16.7
Penn State	**F**	16.7
Syracuse	**F**	16.7
Virginia Tech	**F**	16.7
Washington State	**F**	16.7
Texas	**F**	14.3
USC	**F**	14.3
Creighton	**F**	0.0
Kentucky	**F**	0.0
LSU	**F**	0.0
Memphis	**F**	0.0
Oklahoma State	**F**	0.0
UCLA	**F**	0.0
West Virginia	**F**	0.0

Athletics Directors Accountability

The sex composition of the former coach-new coach hire dyad between 2014-2018 is summarized by athletics director (i.e. if a male coach was replaced by a female, it was coded as male-female) in Table 4. Athletics directors in this sample had the opportunity to make between 1 and 14 head coach hires for women's teams in the past five years. On average, athletics directors had the opportunity to hire 3.87 head coaches of women's teams over five years from 2014-2018. Of all the athletics directors in the sample (n=115), 20 (17.4%) only had the opportunity to make a single hire. Five athletics directors (4.3%) had the opportunity to make 10+ hires over the last five years.

Table 4

Sex composition of head coach vacancy-hires from 2014 to 2018, alphabetically by athletic director

Former Coach-New Coach Sex Dyad Hires					
Athletic Director	**male-male**	**male-female**	**female-female**	**female-male**	**Total Hires**
Alden, Mike	1				1
Alleva, Joe	1			2	3
Alvarez, Barry	2	1	1	1	5
Anderson, Ray	4	1	3	2	10
Anderson, Kevin	2	1	2		5
Babcock, Whit	4	1		1	6
Barbour, Sandy	**2**	**1**		**3**	**6**
Barnes, Scott	3		1		4
Barnhart, Mitch	3				3
Barta, Gary	4		3	1	8
Bates, Brad	2		1		3
Battle, Bill	2		1		3
Benedict, David	1	1			2
Bjork, Ross	1	3	2	2	8
Bobinski, Mike	2		1		3
Bohn, Mike		1	1	1	3
Bowen, Tom	2			1	3
Burke, Morgan	1		1		2
Byrne, Greg	2	1	1		4
Castiglione, Joe		2			2
Christopher, Greg	2	2			4
Chun, Patrick	1		1		2
Clark, Kevin	2				2
Cohen, Jennifer	**4**	**3**	**1**		**8**
Cohen, John	2	1			3
Collier, Barry			1	1	2
Compher, Jeff	3		1		4
Cords, Bill	1		1		2
Coyle, Mark		1	2	1	4
Cunningham, Bubba		1			1
Currie, John	1	1		1	3
Dannen, Troy	2		2		4
De Carolis, Bob			1		1
Del Conte, Chris	4	1	1	1	7
Donati, Jeremiah	3				3
Driscoll, Bob	2	1	1	2	6
Eichorst, Shawn			2		2
Evans, Damon	1				1
Foley, Jeremy	1		1		2
Fulmer, Phillip		1			1
George, Rick		1	2	1	4
Glass, Fred	2	1	2	1	6
Goff, Anton				1	1
Gragg, Derrick	1	1	1		3
Greene, Allen	1				1
Gross, Daryl	1				1
Guerrero, Dan	4				4
Hacket, Jim	2				2
Haden, Pat	1				1
Harlan, Mark	1	2	1	1	5
Hart, Dave	1	2	1	1	5
Hart, Rick	1	2		1	4
Heeke, Dave	1	1		3	5
Hermann, Julie	**2**	**1**	**1**		**4**
Hill, Chris	1	1			2
Hobbs, Patrick	1	3		1	5
Hocutt, Kirby	1	1	1		3
Holder, Mike	1				1

Former Coach-New Coach Sex Dyad Hires					
Athletic Director	**male-male**	**male-female**	**female-female**	**female-male**	**Total Hires**
Hollis, Mark			1	1	2
Hyman, Eric	1				1
Jackson, Mark	5	1	1		7
Jacobs, Jay	2		1		3
James, Blake			1		1
Jarmond, Martin	2	1		1	4
Jurich, Tom	1		1		2
Kelly, Michael			1		1
Knowlton, Jim		1			1
Kraft, Patrick	1	1	1	1	4
Littlepage, Craig	2	2			4
Long, Jeff	5	1	1		7
Lyke, Heather	**1**	**1**	**2**	**1**	**5**
Lyons, Patrick	2	2	2	2	8
Manuel, Warde	1	1	2	2	6
McCaw, Ian	1				1
McGarity, Greg	4	1			5
Monasch, Chris			1		1
Moos, Bill	4	1			5
Muir, Bernard	3	3	2	2	10
Mullens, Rob	2	2	3	2	9
Nicastro, Vince	1				1
Oliva, Joseph			1		1
Patterson, Steve	1	1	1	3	6
Pezman, Chris			1		1
Phillips, Jim	2	1	1	1	5
Pollard, Jamie	1		1	2	4
Ponsetto, Jean Lenti		**1**	**1**		**2**
Radakovich, Dan	1	2	1	1	5
Rasmussen, Bruce	2				2
Reed, Lee	3	5	3	3	14
Rhoades, Mack	1		2		3
Smart, Kirby	1		1	1	3
Smith, Gene	1	1	2	2	6
Stansbury, Todd	1	1	2		4
Sterk, Jim	1	1		1	3
Stricklin, Scott	2			2	4
Swann, Lynn	3	1		2	6
Swarbrick, Jack	8	2		2	12
Tanner, Ray		1		1	2
Taylor, Gene				1	1
Teague, Norwood			2		2
Thomas, Mike			1	1	2
Tyra, Vince	1		1	1	3
Wellman, Ron	3	1	1		5
White, Danny			4	1	5
White, Kevin		1	2		3
Whitman, Josh	3	2	1		6
Wilcox, Stan	1		2		3
Wildhack, John	3	1			4
Williams, H. Michael	3	3	1		7
Williams, David	1		2		3
Williams, Clara	**1**	**1**	**2**		**4**
Woodward, Scott			3		3
Yow, Debbie	**2**	**5**			**7**
Yurachek, Hunter	2	2	1	1	6
Zenger, Sheahon	1	1		1	3
Total	**177**	**93**	**102**	**69**	**441**

**bolded name indicates female athletics director*

Research Question 4: When a head coaching position becomes available for a women's team, what grades, A through F, did an individual athletics directors earn for hiring practices?

4a: Which athletics directors were exceptional in their hiring practices for hiring women head coaches of women's teams, as defined by earning an A grade?

4b: Which athletics directors are failing in their hiring practices for hiring women head coaches of women's teams, as defined by earning an F grade?

When a head coaching position became available for a women's team, each athletics director earned a grade (A-F) for his or her hiring practices. Utilizing the information gathered in Table 4, Table 5 was created to answer the fourth research question. Table 5 summarizes each athletics director's grade based on the number of women head coaches he or she hired for a women's team per the number of opportunities they had to make a hire across institutions. Of the 115 athletics directors in this sample, only 21 received an A grade (18.3%). In comparison, 27 of the 115 athletics directors (23.5%) earned an F. There were 16 schools with a B, 30 with a C, and 21 with a D grade. Since 2014, 20 athletics directors have failed to hire a single woman. In that same time period, 15 athletics directors hired a woman every time a position was vacated.

Table 4 shows the athletics directors (n=20) that only had the opportunity to make a single hire between 2014-2018. This encompasses 17.4% of the athletics directors in this data set. Depending on who the athletics director ultimately hired (a female or male), they either received a 100% (A) or 0% (F). Due to the small sample size of hires these athletic directors have experienced (n=1), their commitment to hiring women coaches

should be cautiously evaluated, as scarce data exists and this factor should be considered when examining their grade.

Table 5

Grades by athletics director for percent of women head coaches hired of women's teams per vacant head coach position

AD	A-F	%
Castiglione	**A**	100.0
Cunningham	**A**	100.0
De Carolis	**A**	100.0
Eichorst	**A**	100.0
Fulmer	**A**	100.0
James	**A**	100.0
Kelly	**A**	100.0
Knowlton	**A**	100.0
Monasch	**A**	100.0
Oliva	**A**	100.0
Pezman	**A**	100.0
Ponsetto	**A**	100.0
Teague	**A**	100.0
White, K	**A**	100.0
Woodward	**A**	100.0
White, D	**A**	80.0
Coyle	**A**	75.0
George	**A**	75.0
Stansbury	**A**	75.0
Williams, C.	**A**	75.0
Yow, D.	**A**	71.4
Bohn	**B**	66.7
Gragg	**B**	66.7
Hocutt	**B**	66.7
Rhoades	**B**	66.7
Wilcox	**B**	66.7
Williams, D.	**B**	66.7
Bjork	**B**	62.5
Anderson, K.	**B**	60.0
Harlan	**B**	60.0
Hart, D.	**B**	60.0
Hobbs	**B**	60.0
Lyke	**B**	60.0
Radakovich	**B**	60.0
Reed	**B**	57.1
Williams, H. M.	**B**	57.1
Mullens	**B**	55.6
Benedict	**C**	50.0
Burke	**C**	50.0
Byrne	**C**	50.0
Christopher	**C**	50.0
Chun	**C**	50.0
Cohen, Jennifer	**C**	50.0
Collier	**C**	50.0
Cords	**C**	50.0
Dannen	**C**	50.0
Foley	**C**	50.0
Glass	**C**	50.0
Hart, R.	**C**	50.0
Hermann	**C**	50.0
Hill	**C**	50.0
Hollis	**C**	50.0
Jurich	**C**	50.0
Kraft	**C**	50.0
Littlepage	**C**	50.0
Lyons	**C**	50.0
Manuel	**C**	50.0
Muir	**C**	50.0
Smith	**C**	50.0
Tanner	**C**	50.0
Thomas	**C**	50.0
Whitman	**C**	50.0
Yurachek	**C**	50.0
Alvarez	**C**	40.0
Anderson, R.	**C**	40.0
Phillips	**C**	40.0
Wellman	**C**	40.0
Barta	**D**	37.5
Bates	**D**	33.3
Battle	**D**	33.3
Bobinski	**D**	33.3
Cohen, John	**D**	33.3
Currie	**D**	33.3
Driscoll	**D**	33.3
Jacobs	**D**	33.3
Patterson	**D**	33.3
Smart	**D**	33.3
Sterk	**D**	33.3
Tyra	**D**	33.3
Zenger	**D**	33.3
Del Conte	**D**	28.6
Jackson	**D**	28.6
Long	**D**	28.6
Barnes	**D**	25.0
Compher	**D**	25.0
Jarmond	**D**	25.0
Pollard	**D**	25.0
Wildhack	**D**	25.0
Heeke	**F**	20.0
McGarity	**F**	20.0
Moos	**F**	20.0
Babcock	**F**	16.7
Barbour	**F**	16.7
Swann	**F**	16.7
Swarbrick	**F**	16.7
Alden	**F**	0.0
Alleva	**F**	0.0
Barnhart	**F**	0.0
Bowen	**F**	0.0
Clark	**F**	0.0
Donati	**F**	0.0
Evans	**F**	0.0
Goff	**F**	0.0
Greene	**F**	0.0
Gross	**F**	0.0
Guerrero	**F**	0.0
Hacket	**F**	0.0
Haden	**F**	0.0
Holder	**F**	0.0
Hyman	**F**	0.0
McCaw	**F**	0.0
Nicastro	**F**	0.0
Rasmussen	**F**	0.0
Stricklin	**F**	0.0
Taylor	**F**	0.0

**bolded name indicates female athletics director*

Hiring decisions made in terms of sex.

Of the 115 athletics directors in this sample, only seven are women (6.1%). These women are bolded in both Table 4 and Table 5. Over the last five years, female athletic directors only had the opportunity to make a small amount of total head coach hires (36 of 441, 8.2%). Table 6 identifies the opportunities athletics directors had to hire head coaches of women's teams in terms of sex of the athletic director. Of the opportunities female athletics directors had to make a hire, they hired other female head coaches a majority of the time (20 of 36, 55.6%) of the time as opposed to male head coaches. In contrast, male athletics directors hired female coaches at a rate of 43.2% (175 of 405).

Table 6
Opportunities athletics directors had to hire head coaches of women's teams in terms of sex from 2014-2018 at select NCAA D-I institutions

	Sex of Athetic Director		
Sex of Coach Hired	**Male n *(%)***	**Female n *(%)***	**Total**
Male	230 (56.8%)	16 (44.4%)	246 (55.8%)
Female	175 (43.2%)	20 (55.6%)	195 (44.6%)
Total	405 (100%)	36 (100%)	441 (100%)

In only terms regarding the sex of the coaches, athletics directors hired male head coaches for women's teams at a higher rate (55.8%) than their female counterparts. Athletics directors hired male head coaches for women's teams at a higher rate (55.8%) than their female counterparts. Of the total number of head coaches that turned over in the last five years, 61.2% (270 of 441) of those positions were vacated by a male. In this

sample, when men vacated a head coaching position they were replaced with another male 65.5% (n=177) of the time.

Table 7

Composition of head coach vacancy-hires of head coaches of women's teams in terms of sex from 2014-2018 at select NCAA D-I institutions

	Sex of Coach Vacating Position		
Sex of Coach Hired	**Male n (*%*)**	**Female n (*%*)**	**Total**
Male	177 (65.6%)	69 (40.4%)	246 (55.8%)
Female	93 (34.4%)	102 (59.6%)	195 (44.6%)
Total	270 (100%)	171 (100%)	441 (100%)

Research Question 5: Does the sex of the athletic director increase or decrease the probability a woman is hired as a head coach?

To address the fifth research question, logistic regression was utilized to test whether athletic director sex significantly predicted the sex of the head coach hired. The sex of the athletic director (male or female) was entered as the independent variable. Head coach sex (male or female) was entered as the dependent variable. Logistic regression analysis indicated that the sex of the athletic director was not a significant predictor of the sex of the head coach hired. The chi-square statistic of 2.043 was not significant (.153), indicating that sex of the athletic director could not make a significant contribution to the predictive power of the model.

Discussion

Main Findings

The number of women head coaches of women's teams at the NCAA Division-I level has been well documented and has remained stagnant for years (Acosta & Carpenter, 2014; LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). In order to help reverse the current stagnation, attempt to understand how and why this stagnation persists is warranted. No prior studies have quantifiably examined the turnover rates of NCAA head coaches of women's teams. This study found that the average number of head coaches for women's teams that turned over per institution between 2014-2018 in this sample was 5.14. This means, on average, institutions in this sample turned over 1.03 head coaches of women's teams each year. This turnover presents itself as an opportunity for institutions, and thereby athletics directors, to hire a woman every single year.

Even with the yearly opportunity to hire women head coaches, institutions and athletics directors as a whole have not capitalized on doing so. Since 2014, in over half of all the vacated positions (246 of 441; 55.8%) a male head coach was hired. Based on data herein, when hiring opportunities are present, men are continuing to be hired at a higher rate than women. These hiring rates are an explanation as to why the stagnation has persisted despite the opportunities to improve the percentage of women head coaches due to the aforementioned head coach turnover.

One of the greatest targets of opportunity to increase the percentage of women in head coaching positions is when a male vacates a position. Table 7 shows that men are hired at the greatest number and highest percentage when it is replacing another man,

despite this being the optimal target of opportunity for institutions and athletics directors. By replacing outgoing male head coaches with women and retaining the women head coaches an institution already has employed, the current stagnation would begin to be reversed. However, currently that is not occurring.

Homologous reproduction.

Over decades, homologous reproduction has been applied to sport contexts to explain the lack of women in coaching and leadership roles (Knoppers, 1987; Sagas & Cunningham, 2004; Stangl & Kane, 1991). Homologous reproduction was empirically tested by previous researchers that found homologous reproduction existed within the hiring processes (Acosta & Carpenter, 2014; Sartore & Cunningham, 2007; Stangl & Kane, 1991). The goal of the present study was to give provide statistical evidence to support or refute the previous findings, as data are becoming outdated. However, the logistic regression analysis indicated that the sex of the athletic director was not a significant predictor of the sex of the head coach hired. The lack of significant statistical evidence to support or refute the presence of homologous reproduction is connected to the lack of women in the athletics director role.

In this sample, a large majority (93.9%) athletics directors were male. Due to the skewed nature of the data regarding who occupies athletics director positions, the hiring rates are also likely affected. Of all the hires that were made over the past five years, 91.8% (n=405) were made by male athletics directors. Table 6 further identifies the opportunities athletics directors had to hire head coaches of women's teams in terms of sex. In the 441 total hires, only 20 hires (4.5%) were women athletics directors hiring

women coaches and only 16 hires (3.6%) were women athletics directors hiring men. The restricted sample size of female athletics directors making hires did not allow this study to provide statistically sound evidence regarding the presence (or lack thereof) of homologous reproduction occurring in hires of head coaches of women's teams at a select group of NCAA D-I institutions.

While the sex of the athletic director could not make a significant contribution to the predictive power of the model in this study, the hiring rates of both male and female athletics directors can still be compared. As seen in Table 6, when given the opportunity to make a hire, women athletics directors hired women coaches 55.6% of the time. Their male counterparts, when given the opportunity to make a hire only hire women coaches 43.2% of the time. While this study can not provide generalizable predictive claims about who is more likely to hire who, when given the opportunity, women in this sample hire other women at a higher rate than men.

For decades, scholars have argued that gender biases along with homologous reproduction systematically work against women looking to enter toe coaching profession (Knoppers, 1987; LaVoi, 2016; Norman, Rankin-Wright, & Allison, 2018; Stangl & Kane, 1991). Within intercollegiate athletic departments, athletics directors are the primary decision makers and hold the majority of power within this hiring process. Over time these hiring decisions can help illustrate if women coaches are valued and supported (or not). The composition of people hired and the rate of head coach turnover by a particular institution or athletics director can reveal a large amount about the culture and decision making practices of an athletics department. This study was the first to examine

the ultimate decisions of head coach hires (Tables 2- 7) and head coach turnover rates (Table 1) for women's teams over time. Decisions surrounding head coach hires and turnover rates reflect retention and overall health of the athletic department's culture. Furthermore, this study linked these data to a specific institution and individual athletics director. The data added a greater level of accountability to those in powerful decision making positions to illuminate the gender bias that still exists in the sporting context.

These data present themselves as one part of a much larger story. The hiring practices of institutions and athletics directors, simply at face value, are a piece of the puzzle. There are many factors that may be an impetus to hiring a women coach or not to. These grades do not necessarily reflect a lack of commitment an institution or athletic director has to hiring, recruiting or retaining women coaches. This is one data point that can help assess hiring practices in a tangible and concrete way. This helps give insight to how hiring practices influence the organizational culture and the overall system in which women coaches exist (LaVoi & Wasend, 2018).

Based on the data, no arguments or generalizations were made that all institutions or athletics directors who earn an A grade are exemplars and those who earn an F are failures or do not value hiring women. For some athletics directors and institutions, there is not yet enough data to properly evaluate their commitment to gender diversity. Over time, however, patterns will emerge. As more data are gathered surrounding the composition of people hired over time and the turnover that occurs within an athletic department can reveal a great deal about both the culture and the practices of hiring decision making the athletics director. This study is not the whole picture; it is just one

part, but an important missing part that can begin to illuminate the occupational landscape for women to a greater degree.

Limitations

This study is subject to multiple limitations. The methodology relies heavily on each institution's official athletics website to be correct, reliable, and updated yearly. The data may be subject to a small margin error if the official athletics website for any institution is incorrect or outdated. With any study that requires data to be collected, the information reported by the researchers may have an additional margin of error based on human mistake. All data will be verified by a second researcher to limit any errors.

While this study is quantitatively robust, it lacks a qualitative component. This study gives no insight into reasons why institutions may be experiencing a high or low rate of head coach turnover. This study also lacks understanding why athletics directors may or may not capitalize on opportunities to hire women in coaching positions. While this study can pinpoint individual athletics directors committed to hiring women and those athletics directors who are not, it is missing is the reasoning behind the decisions they have chosen to make. This study only gives insight into the final decision athletics directors ultimately made and fails to provide data to understand the process of making a hire, such as: attempting to recruit women coaches, the sex composition of all the applicants or the sex composition of the final applicant pool.

This investigation also fails to take into account an individual's multiple identities or ideologies. Sex, gender, race, (dis)ability, sexual orientation and other social identities are all interconnected in an individual's experiences. While women are underrepresented

in sport leadership positions, women of color and women in the LGBTQ+ community are even more so (Lapchick, 2018). This study does not address how hiring practices specifically marginalize these populations.

As previously noted, of the 115 athletics directors in this sample, only 7 are women (6.1%). Of all the hires that were made over the past five years, 91.8% (n=405) were made by male athletics directors. This restricted the sample size and did not allow any generalizable claims about female athletics directors hiring practices and how they may or may not differ from male athletics directors to be made.

Future Research

This study aims to hold institutions and athletics directors accountable for their hiring decisions. Future researchers should address *why* the findings of this study are occurring. Conducting semi-structured interviews with athletics directors who capitalize on their targets of opportunity to hire women coaches will give insight to how athletics directors are finding success hiring, recruiting, and retaining women head coaches. Future researchers should also consider conducting semi-structured interviews with athletics directors who are failing to capitalize on their targets of opportunity to hire women coaches. By gaining this information, it can help fight narratives that may hinder women in coaching.

Future studies should not only address why athletics directors made the decision of whether or not to hire a woman, but also investigate why women may or may not have chosen to take the job if offered to them. Many factors (i.e. salary, geography, family concerns, departmental culture, program reputation) could impact a woman's decision to

accept or decline a head coaching position. By gathering data and conducting interviews with women, we can gain a deeper understanding on what elements influence women to accept or deny job offers and what elements do not. This can educate and inform athletics directors and institutions on how to better recruit and retain women coaches.

Another important aspect to this research and the discussions that occurs as a result is how sex intersects with other social categorizations. Future research should address intersectional identities such as race, (dis)ability, and sexual orientation along with the sex of head coaches and athletics directors. Including intersectional identities will give valuable information about the complex nature of the hiring process. Understanding how other ideologies and identities are further marginalized is crucial in the efforts to truly diversify the coaching profession.

The longitudinal nature of this methodology allows for it to continue to be replicated every year. Tracking both athletics directors and institutions over time will continue to allow patterns to emerge over time. Future studies could use a similar methodology to examine the hiring practices of athletics directors at the NCAA Division-II and –III level to understand the differences or similarities that may be seen at each level within intercollegiate athletics. This methodology could also be utilized to examine hiring practices of institutions' presidents/chancellors when hiring athletics directors, adding another layer of accountability and understanding to the system in which women coaches operate.

Conclusion

The passage of Title IX was simultaneously a win for girls and women in sport and through an unintended consequence, a loss for women in coaching. The number of women coaching women's teams at the NCAA Division-I level has been well documented and remained stagnant for years despite a record number of girls and women competing (Acosta & Carpenter, 2014; LaVoi, 2013; 2014; 2015; 2016; 2017; 2018).

This study examined 86 of the most powerful and visible athletic departments in the NCAA. It was the first to examine the relationship between the number of opportunities an institution or an athletics director had to hire a head coach of a women's team and the number of women who actually became employed. This study has proven there *is* opportunity to reverse the current stagnation of women in coaching that is occurring. On average, the institutions in this sample had the opportunity to make a hire for a women's team every year. However, the number of women in the coaching profession continues to remain stagnant (LaVoi, 2013; 2014; 2015; 2016; 2017; 2018). Each athletics director and institution was also graded on their individual track record in an attempt to provide more accountability to those in decision making positions.

These findings help understand why the stagnation of women in the coaching profession persists. This points to the need for changes within hiring practices and overall changes in departmental cultures to see the number of women in leadership and coaching positions increase. Due to the longitudinal nature of this study, this methodology can, and should, continue to track institutions and athletics director's hiring practices. If robust data is gathered regularly, patterns will emerge and can continue to serve as a tangible

way to measure if athletics directors and institution's value and support women or if they do not.

Researchers must turn their attention to understanding *why* athletics directors are ultimately making the decisions they make within the hiring process. Research also must examine the interests of women coaches and their decisions to accept or deny job offers. Understanding both sides to the hiring process can inform athletics departments on how to better hire, recruit, retain, and support women coaches.

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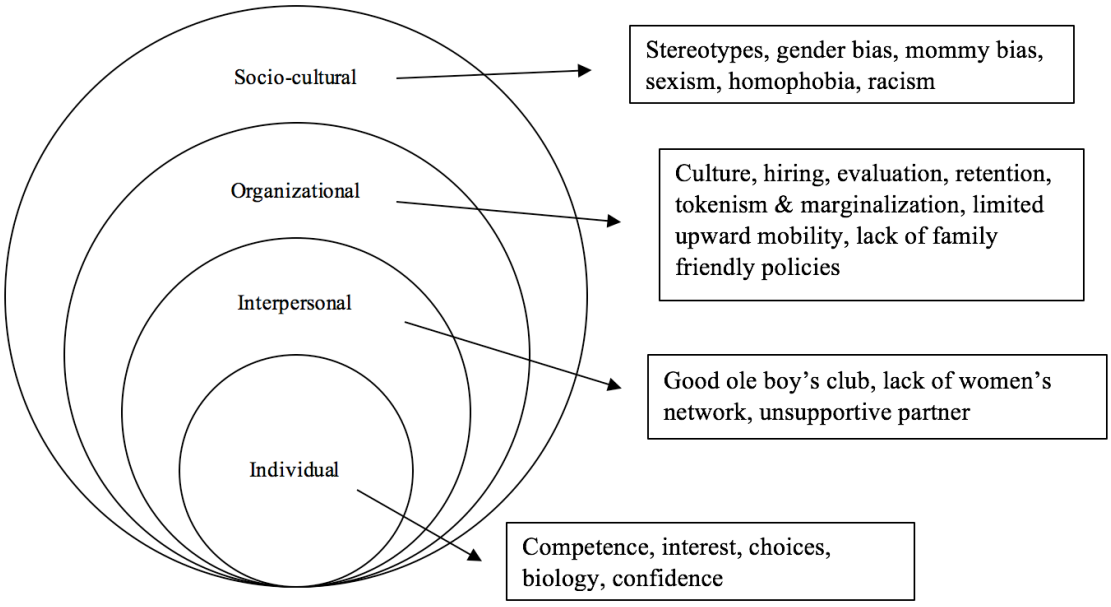
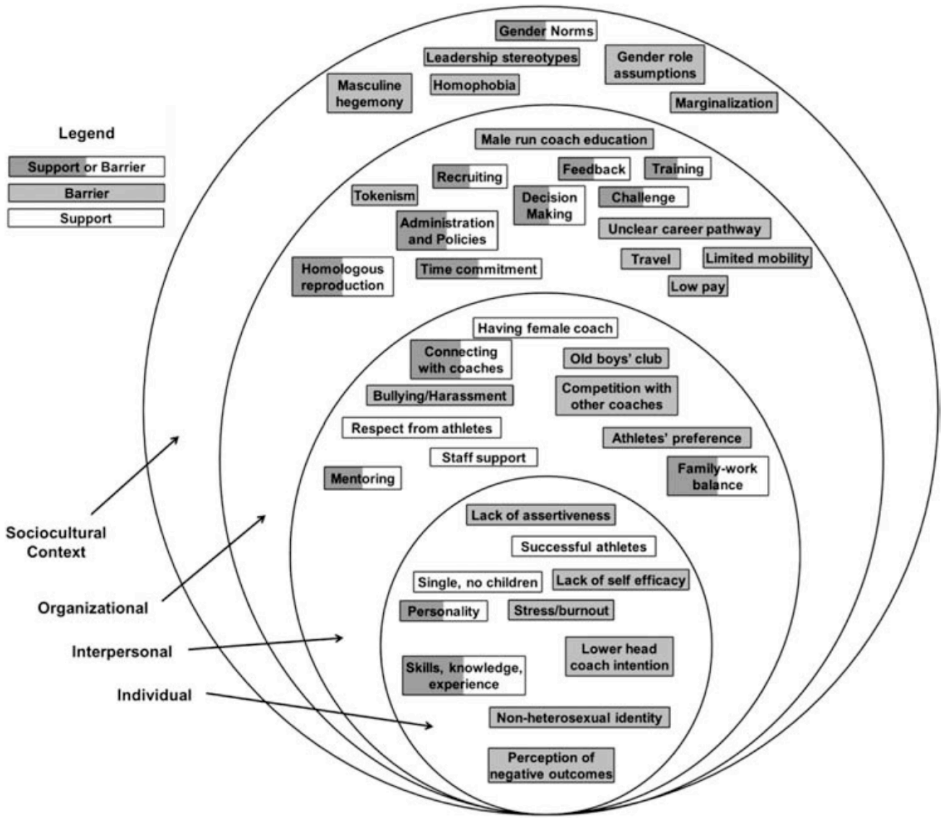
Figure 1.
Ecological model: definitions of levels



Reproduced from LaVoi (2017)

Figure 2.
An ecological model of barriers and supports for female coaches



Derived from LaVoi & Dutove (2012)

Appendix A

Coding Key for Head Coaches

Variable Name	**Variable code**
Year	3 = 2014-2015 4 = 2015-2016 5 = 2016-2017 6 = 2017-2018 7 = 2018-2019
Conference	1 = Atlantic Coast Conference (ACC) 2 = Big 12 3 = Big East 4 = BIG Ten 5 = Pacific 12 (PAC 12) 6 = Southeastern Conference (SEC) 7= American (AAC)
School	1 = Alabama 2 = Arizona 3 = Arizona State 4 = Arkansas 5 = Auburn 6 = Baylor 7 = Boston College 8 = UC Berkeley 9 = Cincinnati 10 = Clemson 11 = Colorado 12 = Connecticut 13 = Duke 14 = Florida 15 = Florida State 16 = Georgia 17 = Georgia Tech 18 = Illinois 19 = Indiana 20 = Iowa 21 = Iowa State 22 = Kansas

	23 = Kansas State 24 = Kentucky 25 = Louisville 26 = LSU 27 = Maryland 28 = Miami (FL) 29 = Michigan 30 = Michigan State 31 = Minnesota 32 = Mississippi 33 = Mississippi State 34 = Missouri 35 = Nebraska 36 = North Carolina 37 = NC State 38 = Northwestern 39 = Ohio State 40 = Oklahoma 41 = Oklahoma State 42 = Oregon 43 = Oregon State 44 = Penn State 45 = Pittsburgh 46 = Purdue 47 = Rutgers 48 = South Carolina 49 = South Florida 50 = Stanford 51 = Syracuse 52 = Tennessee 53 = Texas 54 = Texas A&M 55 = Texas Tech 56 = UCLA 57 = USC 58 = Vanderbilt 59 = Virginia 60 = Virginia Tech 61 = Wake Forest 62 = Washington 63 = Washington State 64 = West Virginia 65 = Wisconsin 66 = Utah

	67 = Notre Dame 68 = Texas Christian University 69 = DePaul 70 = Georgetown 71 = Marquette 72 = Providence 73 = Seton Hall 74 = St. Johns 75 = Temple 76 = Villanova 77 = *no school coded* 78 = Butler 79 = Creighton 80 = Memphis 81 = SMU Southern Methodist 82 = Central Florida 83 = Houston 84 = Xavier 85 = E. Carolina 86 = Tulane 87 = Tulsa
Position	1 = Head Coach, Co-Head Coach, Director of Sport (XC, Golf, Tennis, T & F, Swimming)
Head Coach Name	first name, last name
Head Coach Gender	1 = female 2 = male
Head Coach Turnover	1 = yes 2 = no
Head Coach Turnover Pair	1 = male to male 2 = male to female 3 = female to female 4 = female to male

Derived from the Women's College Coaches Report Card (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018)

Appendix B

Coding Key for Athletic Directors

SPSS Variable Name	**Variable code**
Year	3 = 2014-2015 4 = 2015-2016 5 = 2016-2017 6 = 2017-2018 7 = 2018-2019
Conference	1 = Atlantic Coast Conference (ACC) 2 = Big 12 3 = Big East 4 = BIG Ten 5 = Pacific 12 (PAC 12) 6= Southeastern Conference (SEC) 7= American (AAC)
School	**1** = Alabama 2 = Arizona 3 = Arizona State 4 = Arkansas 5 = Auburn 6 = Baylor 7 = Boston College 8 = UC Berkeley 9 = Cincinnati 10 = Clemson 11 = Colorado 12 = Connecticut 13 = Duke 14 = Florida 15 = Florida State 16 = Georgia 17 = Georgia Tech 18 = Illinois 19 = Indiana 20 = Iowa 21 = Iowa State 22 = Kansas 23 = Kansas State

	24 = Kentucky 25 = Louisville 26 = LSU 27 = Maryland 28 = Miami (FL) 29 = Michigan 30 = Michigan State 31 = Minnesota 32 = Mississippi 33 = Mississippi State 34 = Missouri 35 = Nebraska 36 = North Carolina 37 = NC State 38 = Northwestern 39 = Ohio State 40 = Oklahoma 41 = Oklahoma State 42 = Oregon 43 = Oregon State 44 = Penn State 45 = Pittsburgh 46 = Purdue 47 = Rutgers 48 = South Carolina 49 = South Florida 50 = Stanford 51 = Syracuse 52 = Tennessee 53 = Texas 54 = Texas A&M 55 = Texas Tech 56 = UCLA 57 = USC 58 = Vanderbilt 59 = Virginia 60 = Virginia Tech 61 = Wake Forest 62 = Washington 63 = Washington State 64 = West Virginia 65 = Wisconsin 66 = Utah 67 = Notre Dame

	68 = Texas Christian University 69 = DePaul 70 = Georgetown 71 = Marquette 72 = Providence 73 = Seton Hall 74 = St. Johns 75 = Temple 76 = Villanova 77 = *no school coded* 78 = Butler 79 = Creighton 80 = Memphis 81 = SMU Southern Methodist 82 = Central Florida 83 = Houston 84 = Xavier 85 = E. Carolina 86 = Tulane 87 = Tulsa
Position	1 = Athletics Director
Athletic Director Name	first name, last name
Sex of AD	1 = Female 2 = Male

Derived from the Women's College Coaches Report Card (LaVoi, 2013; 2014, 2015; 2016; 2017; 2018)